Kentucky
UNBRIDLED SPIRIT
Cabinet for Economic Development

Profile of Kentucky's Steel Industry



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Kentucky's Steel Industry

I. Executive Summary

Measured by the value of shipments, Kentucky ranks as one of the top twenty metal exporting states in the primary metal manufacturing and fabricating industries for 2005.[1] Kentucky offers several advantages to firms in the steel industry, including: low utility costs, central location, quality workforce, ports along the Ohio and Mississippi rivers, and the automotive industry's significant presence.

Steel has made some great advances over the last two decades. Over 50% of the steels made today were not in existence 10 years ago. Today's "new steel" is stronger, thinner, easier to shape and corrosion-resistant. It makes safer, more fuel-efficient cars and longer-lasting products. Thanks to improvements in galvanizing and coating, steel is the world's most resistant material to decay, corrosion, fire and floods. That is why today's cars last longer and steel is beginning to be used more and more to frame houses. The industry has used computers and new technology to upgrade and streamline the steelmaking process. Steel is an environmentally responsible material. It is recyclable and steel mills have drastically reduced emissions. Lastly, steel is an economical choice for consumers.[2]

Highlights of the Kentucky steel industry include:

- In 2005, Kentucky exported nearly $936 million primary and fabricated metals to foreign countries with Canada and Mexico making up over $611 million of this amount.[3]
- According to a Kentucky Economic Development Cabinet database, in 2005, there were 57 steel-related facilities with 7,011 employees located in Kentucky.
- For the same year, the Bureau of Labor Statistics lists the state as having 58 steel-related facilities with 3,387 employees, but its data was incomplete.[4]
- The United States exported over $55 billion of primary metal and fabricated metal products in 2005.[5]
- Kentucky is one of the top twenty metal product exporting states.[6]
- The average salary in 2005 for primary metals industry employees in Kentucky is $50,626/year. (See Labor Cost Comparison worksheet in Appendix)
- The automotive, appliance and construction industries are the largest markets for Kentucky steel establishments.
- 20 of Kentucky's steel facilities are considered automobile-related suppliers.

II. Steel Industry in Kentucky

As of July 2006, the steel industry in Kentucky included 57 manufacturing establishments with 7,011 employees, based on surveys conducted by the Kentucky Cabinet for Economic Development. Kentucky has a strong presence in steel production and is one of the top ten steel producing states.

As measured by value of shipments, Kentucky ranks as one of the top twenty primary metal and fabricated metal exporting states in the nation. In 2005, the value of exports for the metal industry in Kentucky totaled nearly $936 million.[7]

From January 2000 to December 2005, 6 new steel-related facilities have been established in Kentucky. This represents an investment of over $60 million and has created 474 jobs. At the same time, 50 facilities have expanded their operations in the state. This represents an investment of over $869 million and has created over 1,500 jobs.

Table 1: Primary and Fabricated Metal Exports (2005)

State	*Value of Shipments*
Texas	$8,092,000,000
California	$4,678,000,000
Ohio	$3,570,000,000
New York	$3,391,000,000
Pennsylvania	$3,350,000,000
Michigan	$2,907,000,000
New Jersey	$2,210,000,000
Illinois	$2,164,000,000
Utah	$2,150,000,000
Nevada	$1,964,000,000
Indiana	$1,624,000,000
Florida	$1,246,000,000
Tennessee	$1,069,000,000
Massachusetts	$1,068,000,000
North Carolina	$1,047,000,000
Washington	$995,000,000
Kentucky	$936,000,000

Source: Data derived from information provided by WISER, at http://wisertrade.org, from US Census Bureau, Foreign Trade Division. (Rounded to the nearest million.)

Steel Companies

Kentucky is home to several state-of-the-art steel facilities producing a variety of products. Some of these facilities are:

- **North American Stainless (NAS)** located in Ghent is the second largest steel employer in Kentucky with 1,105 employees (2005). North American Stainless, part of the most competitive stainless steel manufacturing group in the world, Acerinox, S.A. NAS, produces both long products (such as wire, cold bar, peeled bar, angle and rebar) and flat products (for use in commercial manufacturing for everything from appliances to automotive exhausts). It is the only North American single integrated site that takes a product from melt to finish for both flat and long products. It is also the largest investment by a Spanish corporation in the United States.[8]
- **AK Steel** in Ashland is the state's largest steel employer with 1,150 employees. It was awarded the 2005 Max Eward Safety Award from the American Coke and Coal Chemicals Institute (ACCCI). The award recognizes the ACCCI-member coke plant with the best annual safety record. During 2005, AK Steel's Ashland coke plant went the entire year without recording a single OSHA recordable injury. This marked the eighth time in nine years that an AK Steel cokemaking facility had been honored as the industry's safest. It was also named one of America's Most Admired Companies by Fortune Magazine.[9]

- **Louisville Forge and Gear Works, LLC** is a custom manufacturer of highly engineered, impression die steel forgings for demanding applications. Its products are shipped throughout the world to serve a diverse industrial clientele including the following industries: 1) automotive/truck; 2) aerospace; 3) off-highway equipment; 4) farm machinery; 5) mining; and 6) oil fields markets.
- **Gallatin Steel Company,** a state-of-the-art steel mill at Ghent in Gallatin County is a joint venture between Dofasco, Inc. and Gerdau Ameristeel. It began production in 1995 and is one of the most technologically advanced mills in the world. It currently produces over 1.4 million tons of hot steel bands on an annual basis and recycles over 4,000 tons of scrap metal daily.

Other large steel employers in Kentucky include: Stephens Pipe and Supply, Newport Steel Corporation, Emerson Power Transmission, Whip-Mix Corporation, Gerdau Ameristeel and Sypris Technologies, Inc.

Table 2: Major Steel Employers in Kentucky (2005)

Company	*Employment*
AK Steel Corp.	1,150
North American Stainless	1,105
Louisville Forge & Gear Works	488
Gallatin Steel	423
Stephens Pipe & Supply	386
Sypris Technologies, Inc.	310
Newport Steel Corp.	230
Emerson Power Transmission	220
Whip-Mix Corp.	165
Gerdau Ameristeel CCK Mill	160

Source: Kentucky Cabinet for Economic Development (NAICS Codes 331111, 331210, 332111, 331221 and 331222)

Kentucky Advantages

Kentucky is attractive to the steel industry for several reasons, including:

- **Ports along the Ohio and Mississippi Rivers**: Access to these river ports provides low cost transportation of products to national and global markets.
- **Low Cost of Electricity**: Due largely to its abundant coal reserves, in 2004, Kentucky ranked as the lowest cost state for the provision of industrial electrical power.[10] Because the steel industry is so energy intensive, the cost of electricity is a significant cost factor.
- **Central Location**: Kentucky is centrally located within the Eastern United States, where steel consumption is centered. Two-thirds of the nation's population, personal income, and manufacturing establishments are located within 600 miles of Kentucky's borders.
- **Logistics:** Kentucky has access to 6 interstates and several US highways and state parkways. This gives the state a distinct advantage over other states. A 2005 corporate survey conducted by *Area Development Magazine* had highway accessibility as the number one factor listed by most corporations as the primary reason for selecting a site, chosen by 91.4% of respondents.[11]

- **Auto Industry**: Steel is the largest item by weight input in an automobile. Due to the increased use of advanced high-strength steels, auto parts are more dent-resistant and up to 30 percent stronger than a decade ago.[12] In 2004, Kentucky ranked 4th among the states in light vehicle production,[13] and it is the location for more than 460 motor vehicle-related suppliers. Although automobiles have increased the amount of aluminum per vehicle over the last fifteen years, steel remains the chief ingredient for most automobiles.
- **Quality Workforce**: Kentucky ranks 23rd among the 50 states in Gross State Product (GSP) per Wage, and Kentucky's workforce produces almost two percent more output per dollar in wages than the U.S. average.[14] A 2005 corporate survey conducted by *Area Development Magazine* listed labor cost as the second most important factor considered by corporations when selecting a site or location. [15] See table 7 for a comparison of labor cost with competitor states.

III. Profile of Kentucky Steel Companies

The steel industry in Kentucky consists of companies that produce steel as their primary product and those that fabricate steel into other products, such as wires or automotive parts. Kentucky steel-related companies represent seven different industry classifications, but they are primarily concentrated in 5 industries. Table 3 shows the number of facilities and employees for the 6-digit NAICS industries with a significant presence in the Kentucky economy. Rolled steel shape manufacturing (NAICS 331221) has the largest presence in Kentucky with 20 establishments and nearly 3,400 employees. Iron and steel mills (NAICS 331111) also composes a large share of Kentucky's steel industry with 14 facilities and 1,872 employees.

Common products of Kentucky steel establishments include stainless steel coils, sheets, and long products such as bar, wire, angle and rebar. Many of the facilities specialize in producing products for the automotive industry and the majority of their production goes to supply the demands of that industry. Other areas of concentration are in fabricating and forging steel and stainless steel productions.

Table 3: NAICS Composition of Kentucky Steel Facilities

NAICS Code	*Description*	*Facilities*	*Employees*
331221	Rolled Steel Shape Manufacturing	20	3,382
331111	Iron & Steel Mills	14	1,872
332111	Iron & Steel Forging	11	1,595
331222	Steel Wire Drawing	7	812
331210	Iron/Steel Pipe & Tube Mfg (Purchased Steel)	4	321

Note: Since many facilities are classified into more than one NAICS code and not all NAICS codes are mentioned, the sum of the 5 industries does not equal the total of all steel-related facilities.
Source: Kentucky Cabinet for Economic Development.

The Kentucky steel industry has a very international flavor. Of the state's 57 steel-related facilities listed in the Economic Development Cabinet's database, 6 are foreign-owned, representing companies from five countries and employing over 1,700 employees in Kentucky (See Appendix- Kentucky Steel Related Facilities for the list).

Spain and Luxembourg account for much of the foreign investment in the Kentucky steel industry with three of the six facilities between them and employing over 1,560 people.

Table 4: Foreign-owned Steel Facilities in Kentucky

Country	*Facilities*	*Employment*
Total	6	1,732
Spain	1	1,105
Luxembourg	2	461
Belgium	1	100
Germany	1	58
Netherlands	1	8

Source: Kentucky Cabinet for Economic Development (July 2006)

IV. Business Cost Comparison

Kentucky has the second lowest overall cost of doing business when compared to the states within the region and with states that are generally considered to be economic competitors with Kentucky. The index utilized to measure the overall cost of doing business within a state ranks Kentucky as the state with the 5th lowest cost nationally with a state index of 86. The national average index is 100%. According to this index, the overall cost of doing business is 14 percent below the national average.[16]

Table 6: Cost of Doing Business for Competitive Steel States (2004)

	Overall Cost of Doing Business		*Unit Labor Cost*		*Energy Cost*		*State & Local Taxes*	
	Index	**Rank**	**Index**	**Rank**	**Index**	**Rank**	**Index**	**Rank**
U.S.	100%	-	100%	-	100%	-	100%	-
Competitor States	99%	-	100%	-	94%	-	93%	-
Alabama	99%	28	104%	43	86%	20	76%	1
Illinois	102%	39	102%	33	92%	26	93%	17
Indiana	92%	12	94%	16	79%	12	98%	26
Kentucky	**86%**	**5**	**86%**	**6**	**67%**	**1**	**98%**	**26**
Ohio	100%	30	100%	29	94%	29	107%	40
Pennsylvania	101%	37	101%	31	110%	39	98%	26
Tennessee	93%	14	97%	23	87%	23	83%	4
West Virginia	96%	22	100%	29	70%	3	108%	42

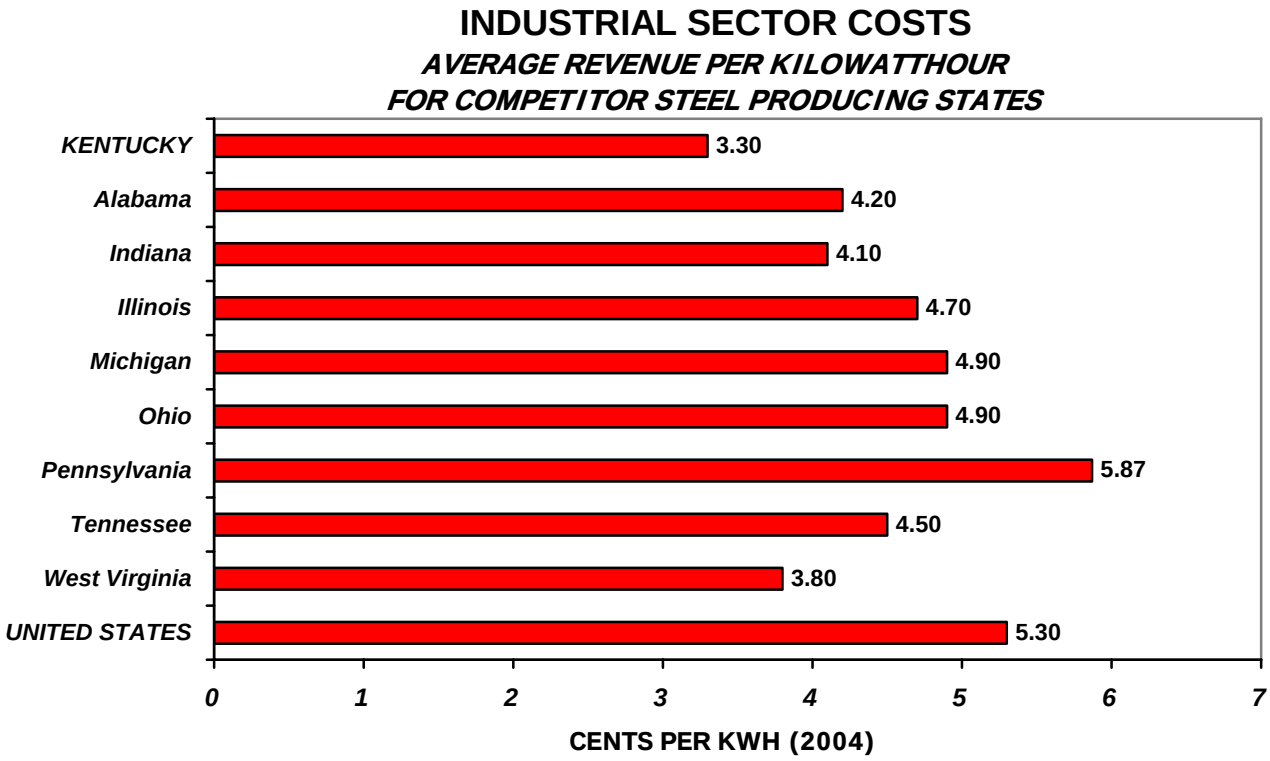
Note: A ranking of one represents the lowest cost.

Source: Derived from data provided by *North American Business Cost Review*, 12th Edition, Prepared by Economy.com, Inc., - Updated May 2006. A ranking of 1 represents the best condition or the lowest business cost.

Two of the major costs for companies in the steel industry are energy and labor. Labor is a significant cost factor for the steel industry as with all manufacturing industries. The following section details how Kentucky compares to the other competitor steel industry states with respect to these business costs.

Utility Cost

A globally competitive business environment compels companies to examine the long-term costs of production and distribution, and to focus on regional differences in the net costs of doing business. Among the most significant factors having a direct influence on bottom-line costs is the annual capital that must be committed to utility consumption, which is especially true for the steel industry.



Source: Energy Information Administration/Electric Power Annual 2004

Kentucky enjoys a tremendous competitive advantage in the provision of energy, natural gas, and water supply. The state's large coal reserves and their resulting proximity to coal-burning utility plants, its direct location on the interstate natural gas pipeline corridor, and an abundant natural water supply derived from an extensive network of rivers, streams, and lakes, keep Kentucky's utility costs among the very lowest in the nation. Kentucky's electric power cost, in the industrial sector, has ranked the lowest in the nation for four consecutive years.

Approximately 97 percent of Kentucky's electric power is produced by coal-fired power plants, with the balance generated by hydroelectric dams, fuel oil, and natural gas.

Kentucky's large coal reserves ensure abundant supplies of electric power for the future. In turn, a large number of utility providers and oversight by the Kentucky Public Service Commission continue to ensure competitive rates for industrial users. These power distributors are allowed to negotiate lower economic incentive rate contracts. Significant discount rates can be granted to expanding operations.

Labor Cost

The cost of labor for Kentucky employers compares very favorably to other top steel producing and competitor states. For 2005, the weekly wages for employees in all private industries and for manufacturing in Kentucky are below the U.S. average. Overall employee wages in Kentucky are 2nd lowest among the steel producing states. For manufacturing in these same states it has the third lowest wages (See Table 7). A 2005 corporate survey conducted by *Area Development Magazine* listed labor cost as the second most important factor considered by corporations when selecting a site or location.

Table 7: Labor Cost Comparison Among Competitor Steel Producing States

	Average Weekly Wages: 2005	
State	**All Private Industries**	**Manufacturing**
United States	$779	$948
Alabama	$654	$782
Illinois	$843	$969
Indiana	$682	$927
Kentucky	**$649**	**$847**
Michigan	$791	$1,090
Ohio	$708	$927
Pennsylvania	$755	$909
Tennessee	$689	$1,046
West Virginia	$587	$781

Sources: Derived from data provided by the U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages www.bls.gov

V. The Steel - Automobile Relationship

Automobile Industry in Kentucky

Kentucky has a strong presence in the automobile industry. Kentucky ranks 3rd among the 50 states in total light vehicle production. In 2005, 1,151,897 cars and light trucks were produced in Kentucky, which is about 9.8 percent of all cars and trucks manufactured in the United States.[17] The gross state product for the Kentucky automotive industry was nearly $6.258 billion in 2004 representing 4.7% of the gross state product.

As of year-end 2005, there are four automobile assembly plants located in Kentucky that employ over 19,500 people. Ford has two plants in Louisville that produce the Ford Explorer, Sport Trac and Mercury Mountaineer in one plant and the Ford Super Duty F-Series trucks and Excursion SUV models in the other plant. GM's Bowling Green plant manufactures the Corvette and the Cadillac XLR, and Toyota's Georgetown plant makes the Camry, Avalon and Solara. In addition to the four assembly plants, Toyota's North American Manufacturing Headquarters is located in Erlanger. In 2004, the auto-related industries in Kentucky employed over 90,000 people.

Table 8: Total Light Vehicle Production in 2005

State	*Total Light Vehicle Production*
Michigan	2,517,188
Ohio	1,794,589
Kentucky	**1,151,897**
Missouri	1,147,977
Indiana	773,020
Tennessee	693,205
Alabama	479,465
Illinois	455,262
California	417,398
Georgia	392,531

Source: *Automotive News 2006 Market Data Book*

Steel Usage in Automobiles

The transportation industry is one of the largest markets for steel. Steel represents the single largest material in most automobiles. One of the new innovations to come along in the automotive industry is the introduction of the Ultralight Steel Auto Body – Advanced Vehicle Concepts (ULSAB-AVC). ULSAB-AVC is a new concept initiated by the steel industry using advanced high-strength steels (AHSS) and a new automotive design to provide more strength at a lower weight. Tests done on the ULSAB-AVC designs have shown the following improvements: 1) A 25% weight reduction; 2) An 80% improvement in torsional rigidity (a vehicle's resistance to twisting forces.); 3) A 52% improvement in bending rigidity (a vehicle's resistance to bending forces.) and 4) first body mode (a vehicle's resistance to impacting forces.) (**www.ulsab-avc.org**)

Auto-Related Steel Facilities

The migration of the automobile industry southward over the last two decades gives Kentucky some distinct advantages over other states. Kentucky is located at the heart of the automobile producing regions in the United States. There are 20 steel-related facilities that are considered auto-related within the state, and these establishments have nearly 3,300 employees. (Source: Kentucky Cabinet for Economic Development, KBIIS database, July 2006). Crankshafts, brakes, custom forging, press metals, steel tubing and die-cast automotive parts are some of the common products of Kentucky

steel-related facilities sold to automotive assembly plants and automotive parts manufacturers.

VI. Other Steel Product Uses and Information

Other Uses

Kentucky steel facilities produce a variety of steel related products. Roofing is one of the hot spots for metal. On average thirteen million homes are re-roofed every year. One advantage that metal roofs have over asphalt shingles is longevity. A metal roof will last the life of the house, but asphalt shingles have an average life expectancy of 17.3 years. Metal roofs have superior durability, lower-life cycle costs and are lighter per unit area when compared to other non-metal alternatives.[18]

Bridges and steel utility poles offer a growing market for the steel industry. In the late 1990's, a high performance steel (HPS) was developed for use in bridge steel plates. It is stronger than traditional steel and 28% lighter.[19]

Utility poles, which have traditionally been made from trees, are being replaced by steel distribution poles. They are lighter, require less maintenance than traditional wooden poles, have a life expectancy of over 50 years, are resistant to insects and rot, and don't require the use of a toxic chemical preservative. It takes an entire tree to create one utility pole. One recycled car can create four such poles. At the end of its lifecycle, a tree must be disposed of, but a steel poll can be recycled.[20]

Recycling

The steel industry has made great strides over the last three decades to become more environmentally friendly. Nearly 76 million tons of steel were recycled in 2004. This represents a recycling rate of almost 71%. The recycling rate for automobiles that year was 102.9% or three percent more steel was recycled from older vehicles than went into the production of newer ones. There was an average of 26 vehicles recycled per minute during that year. The same year 46 million appliances were recycled, a recycled rate of 89.7%. The most recycled product year-in and year-out is structural beams and plates, with a recycle rate for 2003 of 96%.[21] Interestingly, the steel from the 9/11 attack on the World Trade Center was recycled and used in the production of a warship for the United States Navy.[22]

Environment

From 1975 to 2002, the steel industry spent over $60 billion in new technologies in order to improve energy efficiency and productivity. During the same period, the greenhouse gas emissions from the production of one ton of steel dropped by 45% and air and water emissions produced were lowered by 90%. Today nearly 95% of the water used for steel making is recycled. Virtually all hazardous waste produced in the process is recycled and put to a beneficial use. Every ton of steel recycled saves 2,500 pounds of iron ore, 1,400 pounds of coal, and 120 pounds of limestone.[23]

Innovation

The North American steel industry is dedicated to producing the highest quality steel in the world and the greatest productivity as well. More than 140,000 engineers, technicians, and scientists are constantly seeking ways to improve the productivity and quality of steel. From 1980 to 2003, productivity tripled. It took one third of the manhours in 2003 to produce a ton of finished steel as it did 25 years earlier. The steel industry is one of the world's most productive and yet it constantly seeks out ways to improve upon this record.[24]

VII. Location and Transportation System

Kentucky's location in the geographical center of the Eastern United States and its extensive highway, air, rail, and waterways transportation systems place the Commonwealth in a strong position to compete in the global marketplace. Two-thirds of the nation's population, personal income, and manufacturing business establishments are located within 600 miles of Kentucky's borders. Kentucky's intermodal freight and passenger transportation systems provide safe, efficient, and cost-effective access to all points of the globe.

Over the last 30 years, manufacturers in the auto industry have steadily moved southward, and as a result, a new auto corridor has been created that runs southward from Michigan to Alabama. Kentucky is in the center of this auto corridor. According to a December 2004 report issued by the Bureau of Labor Statistics, located within a 500 mile radius of Central Kentucky are 4,829 motor vehicle-related manufacturers. They account for 62 percent of all the motor vehicle-related manufacturers in the United States. Included in these firms are 69 auto assembly plants.[25]

Transportation

A freight distribution network that is efficient, safe, and technologically competitive makes Kentucky an ideal location for businesses needing just-in-time delivery and reliable access to markets and suppliers. Geographically located within a day or two highway travel of two-third's of the nation's buying power, Kentucky maintains a continuing six-year highway construction and improvement plan that ensures necessary structured growth and regular maintenance.

Kentucky's railroads – the CSX, Norfolk Southern, and Canadian National Railroads - ensure direct service from Kentucky to the major rail centers of the Great Lakes, Gulf of Mexico, and Atlantic Seaboard.

With 1,100 miles of navigable waterways, Kentucky is at the center of a port and waterways system that offers globally competitive, inexpensive transport for bulk materials and containerized freight. With its access to the junction of the Upper and Lower Mississippi, Ohio, and Tennessee-Tombigbee navigation corridors, Kentucky has a waterway link to the Great Lakes and Canada, to Mexican and South American

markets, and to the deep-draft ports of New Orleans and Mobile for overseas shipments.

Accessibility to major airport services and safe, efficient air travel for business purposes are well addressed by Kentucky's statewide system of commercial and general aviation airports. Non-stop international flights depart from the Cincinnati/Northern Kentucky International Airport and from the Louisville International Airport.

In April 2005, the Cincinnati/Northern Kentucky International Airport was ranked by London based *Sky-Trax Research* as the second best airport in North America for passenger service and convenience.[26] The airport was also ranked number 1 for on-time arrivals and departures among major airports for the first half of 2006.[27]

The Louisville International Airport is home to the international air sorting hub of United Parcel Service (UPS), whose operations have helped make it the fourth largest cargo airport in the nation in 2005. The airport handled 4 billion pounds of cargo, freight and mail and accommodated 3.7 million passengers in 2005.[28]

VIII. Additional Steel Industry Resources

Center for Manufacturing
The Center for Manufacturing (CRMS), located in Lexington at the University of Kentucky - **www.crms.uky.edu/crms/index.htm,** is renowned worldwide for its research, education, and technical assistance in manufacturing. CRMS provides engineering assistance to approximately 15,000 people in North America and Europe with its staff of professional engineers with extensive industrial experience. CRMS also conducts research on manufacturing systems, and provides a wide range of educational opportunities for students and industrial professionals. CRMS has earned praise from organizations, such as the Society of Manufacturing Engineers, in recent years for its strong emphasis on manufacturing research and education.

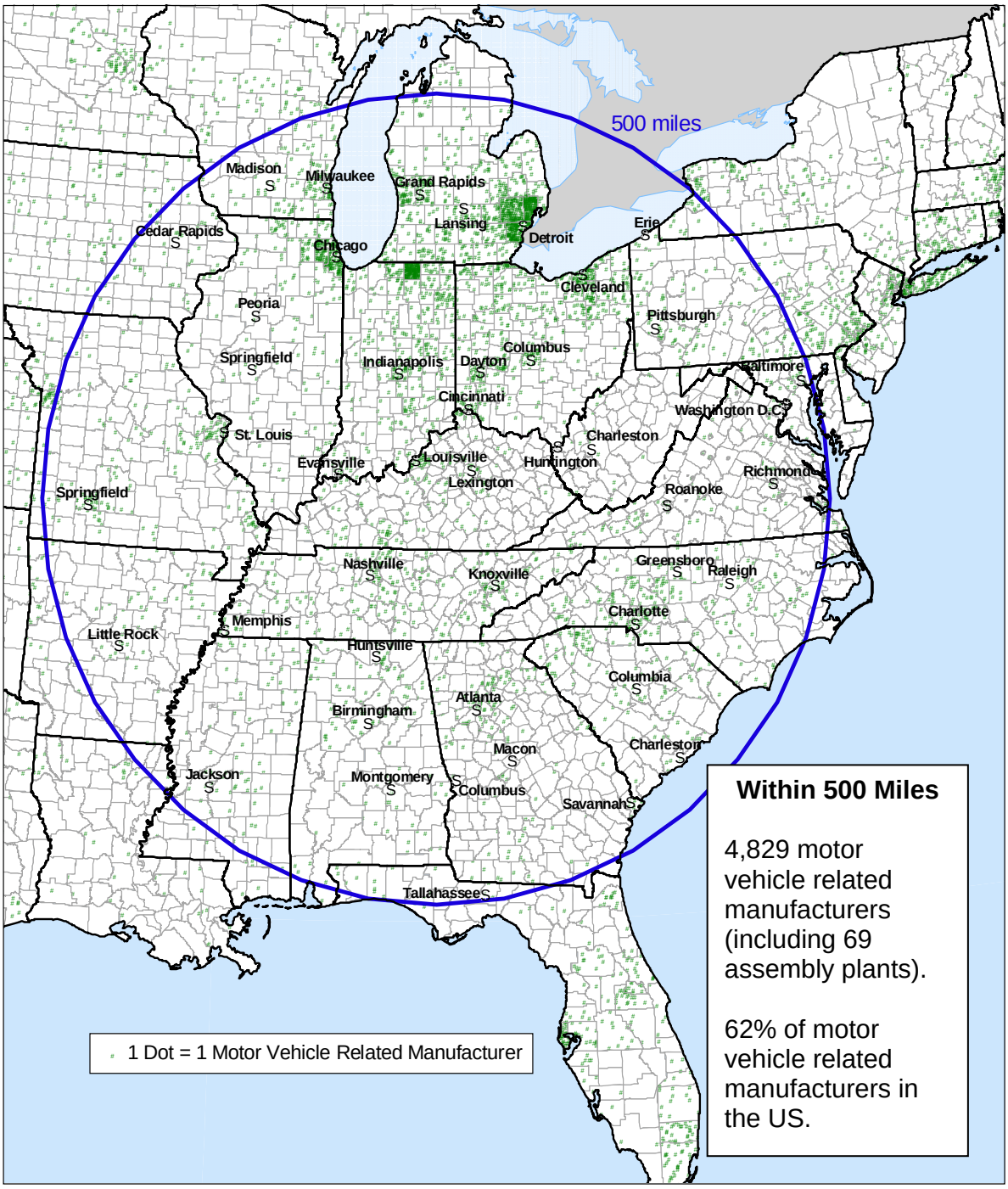
Because of CRMS' capabilities, Toyota Motor Manufacturing selected CRMS to develop a working model of the Toyota production system. CRMS' efforts with Toyota resulted in the Lean Manufacturing program, which is an integrated research, education, and technology transfer effort. The CRMS Lean Manufacturing program has trained thousands of people from hundreds of companies throughout the world on the concepts of lean manufacturing. The Lean Manufacturing program includes courses for operating managers and first-line supervisors, customized in-plant training, the International Lean Manufacturing Conference, Lean Manufacturing Network (users group for groups practicing lean manufacturing principles), and a simulation that demonstrates the effect of lean manufacturing implementation.[29]

Bluegrass State Skills Corporation
The Bluegrass State Skills Corporation (BSSC), **www.thinkkentucky.com/bssc**, was established in 1984 by the General Assembly as an independent, de jure corporation to stimulate economic development through programs of skills training. BSSC provides training grants for the training of workers of Kentucky's new and expanding companies

and for skills and occupational upgrade training of workers of Kentucky's existing companies. BSSC acts as a broker by coordinating the resources of providers of skills training and employment services. BSSC also administers any special state appropriation for industry specific training. BSSC is attached to the Cabinet for Economic Development for administrative purposes and in recognition of the relationship between economic development and skills training efforts.[30]

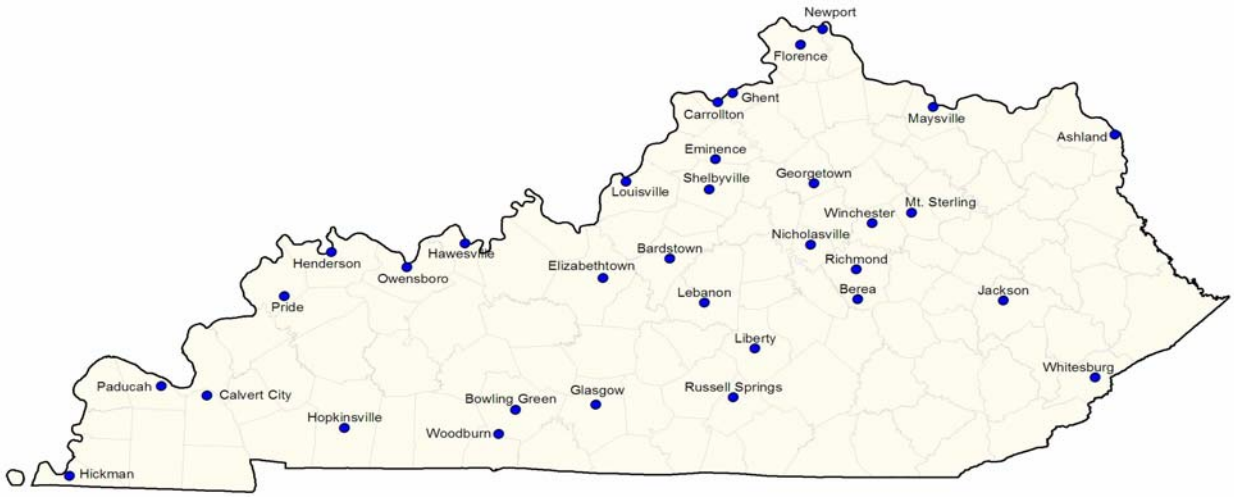
APPENDIX

Motor Vehicle Related Manufacturers within 500 Miles of Central Kentucky



Map Date: 6/27/2005 Source: U.S. Census Bureau, County Business Patterns 2001-2002, issued December 2004

Kentucky Steel Plants and Facilities
57 Plants and Facilities
Employment – 7,011



Source: Kentucky Cabinet for Economic Development.

Kentucky's Steel-Related Facilities (June 2006)

Facility Name	Product Description	Employment
Ashland		
AK Steel Corp.*	Steel slabs	900
AK Steel Corp.*	Coke making	250
Kentucky Electric Steel LLC*	Steel Flat Bars	136
Bardstown		
AA Machine Inc.	Industrial Machine Parts	6
MST Steel Corporation of Kentucky	Slitting & Cold-reduction of steel coil	12
Berea		
Kentucky Steel Center Inc. *	Steel service center: coil slitting & steel sheets	70
Bowling Green		
Kobe Aluminum Automotive Products, LLC *	Aluminum forging plant	73
Calvert City		
Gerdau Ameristeel CCK Mill	Structural steel mill; angles, channels & flats	160
Carrollton		
Parthenon Metal Works*	Steel tubing	59
Elizabethtown		
Dufasco Stainless Tubular Products	Stainless steel tubing	38
John Mills Ornamental Iron Shop	Steel fabrication	2
Eminence		
Steel Technologies Inc.*	Steel service center, steel rolling, annealing and slitting/blanking	143
Florence		
Chuo Mubea Suspension Components Inc. (CMSC)*	Hot formed spring wire	4
IT Spring Wire LLC*	Manufacture of high-strength steel wire for coil springs, as for in automotive apps	58
Plymouth Steel Corp.	Steel bars	27
Georgetown		
International Crankshaft, Inc. *	Crankshafts and steel forgings	150
Louisville Forge & Gear Works *	Steel forging, crankshafts, powder metal sinter forgings, connecting rods, customized parts	488
Ghent		
Ghent Steel Industries, LLC	Coil steel process	14
North American Stainless	Stainless steel coils, sheets, and long products (bar, wire and rod)	1,105
Steel Technologies Inc.	Process flat rolled steel	101
Gallatin Steel	Hot rolled coiled steel, flat rolled steel	423
Glasgow		
Felker Brothers Corp.	Stainless steel pipe, stainless steel pipe and tube 2" thru 24" in diameter	49
Hawesville		
Columbia Specialty Metals	N/A	N/A
Henderson		
Taubensee Steel & Wire Co.	Steel Wire	49
Hickman		
Hickman Pipe & Tube Inc.	Steel sprinkler system pipe	25
Hopkinsville		
Plymouth Extruded Shapes	Stainless, carbon & alloy steel extrusions; special &	94

	structural titanium & nickel base shapes	
PTC Alliance	Cold drawn steel tubing	53
Superior Graphite Co.*	Granular synthetic graphite & desulfurized petroleum coke	70
Jackson		
Combs Custom Manufacturing	Truck bumpers & accessories, push bares, grilles & grille guards; equipment parts – loaders, dozers, handrails	2
Lebanon		
Portland Forge	Custom impression steel die forgings for truck & farm machinery industries	117
Liberty		
Floyd Industries LLC	Livestock handling equipment made from tubular steel	N/A
Louisville		
Armstar Steel LLC	Cold roll steel wallstuds, floorjoists and roof trusses	N/A
Builders Metal Supply Inc.	Steel fabrication	21
Cardinal Manufacturing Co.*	Steel, bronze, brass & aluminum roll formed metal products and parts	58
Dafco Inc, Div Dameron Alloy Foundries	Investment castings	50
Millennium Forge Inc.*	Steel forging & fittings for valve & automotive use, custom forging-raw	75
Steel Structural Systems Inc.	Roll formed steel framing components & light-gauge metal construction material	5
Sypris Technologies Inc.*	Custom forgings	310
Whip-Mix Corp.	Dental equipment & supplies, investment jewelry casting, vacuum mixing laboratory equipment and gypsum powders.	165
Worthington Steel Co. Sub Worthington Industries Inc.	Cold and hot rolled steel processing	68
Maysville		
Emerson Power Transmission	Power transmission reducers, gears	220
Mt. Sterling		
Nooyen Manufacturing	Galvanized steel pig flooring & galvanized dog kennels	8
Newport		
Newport Steel Corp	Steel pipes	230
Nicholasville		
Adcom Wire Co.	High carbon spring wire, bright plating	115
American Building Components	Metal building products	42
Owensboro		
Ken-Tron Mfg Inc.*	Wire drawing & precision stampings for electronics, automotive, battery, medical and television products	100
Paducah		
JMS Metal Services, Inc.	Metal processing, distributing	32
Pride		
Pride Industries Inc.	Steel & aluminum standing seam roofing, preformed metal shingles	20
Richmond		
Asahi Forge of America Corporation*	Press forging for the automotive industry	31
Russell Springs		
Stephens Pipe & Supply	Chain link fence, industrial gates, dog kennels	386
Shelbyville		

Bekaert Corp.*	Preformed steel staple wire, fine wire, flat wire, nylon-coated wire, tin-coated wire and galvanized wire	100
Bluegrass Forging Tool & Die	Die forging, tool & die	10
Whitesburg		
Drill Steel Service Inc.	Steel rods, overcast, mandoors and other metal products. Distribute cutting bits and roof bolt products	32
Winchester		
Advanced Green Components, LLC*	Manufacture forgings & machined rings for tapered roller bearings	115
CONTECH Construction Products	Steel retaining sheets & multiple bridge planks	58
MISA Metal Processing of Kentucky	Steel processing & coil slitting	4
Woodburn		
Precision Strip Inc.*	Steel, aluminum & copper processing & slitting service	78
		TOTAL
	Employees	**7,011**
	Facilities/Plants	**57**
	Automotive Related Facilities	**20**

* Indicates that the facility produces or manufacturers automotive related products as of July 10, 2006.

Introduction and Methodology: The Kentucky industry reports provide a list of facilities (with 10 or more employees) normally associated with Cabinet programs designed to locate and retain industry. Most information is taken directly from surveys completed by each facility or from phone or personal contact with the facility. Survey information is collected on an annual basis. Some facilities do not fully complete the survey instrument and in some cases incorrectly complete surveys. Facility name, address, location, product or service, employment and other information may change and often does change between annual survey attempts. While all attempts are made to capture changes between annual surveys from data provided by facilities, local economic development contacts, media announcements, and Cabinet programs designed to locate and retain industry, no guarantee can be made that changes will be discovered.

Labor Cost Comparison (Annual Average Wage): 2005

States	Private Sector	Manufacturing	Primary Metal	Fabricated Metal
United States	**$ 40,499**	**$ 49,286**	**$ 52,075**	**$ 42,426**
Alabama	$ 34,003	$ 40,654	$ 52,223	$ 38,998
Alaska	$ 38,798	$ 35,763	No Data	$ 41,991
Arizona	$ 37,709	$ 54,617	$ 43,636	$ 41,652
Arkansas	$ 30,772	$ 34,211	$ 49,072	$ 35,985
California	$ 45,664	$ 59,744	$ 46,534	$ 43,129
Colorado	$ 41,591	$ 53,686	$ 54,433	$ 51,378
Connecticut	$ 53,689	$ 63,035	$ 52,732	$ 40,338
Delaware	$ 44,630	$ 52,519	No Data	$ 78,129
District of Columbia	$ 61,572	$ 75,822	$ 39,612	$ 36,219
Florida	$ 36,055	$ 43,419	No Data	$ 43,500
Georgia	$ 39,506	$ 42.217	$ 40,340	$ 32,690
Hawaii	$ 34,566	$ 33,869	$ 50,799	$ 45,080
Idaho	$ 30,506	$ 42,843	$ 61,787	$ 38,919
Illinois	$ 43,848	$ 50,413	$ 49,699	$ 37,594
Indiana	$ 35,467	$ 48,229	$ 35,753	$ 34,543
Iowa	$ 32,645	$ 43,058	$ 50,626	$ 38,959
Kansas	$ 34,248	$ 44,084	$ 46,724	$ 40,806
Kentucky	**$ 33,730**	**$ 44,033**	**$ 50,626**	**$ 38,959**
Louisiana	$ 33,487	$ 49,412	$ 47,837	$ 59,897
Maine	$ 32,106	$ 42,110	$ 54,398	$ 44,207
Maryland	$ 42,782	$ 54,530	$ 45,122	$ 46,220
Massachusetts	$ 50,419	$ 62,475	$ 42,006	$ 34,435
Michigan	$ 41,140	$ 56,681	$ 42,494	$ 41,360
Minnesota	$ 40,972	$ 48,911	$ 36,987	$ 33,266
Mississippi	$ 29,199	$ 34,557	$ 49,063	$ 36,958
Missouri	$ 36,198	$ 43,906	$ 51,680	$ 38,793
Montana	$ 27,937	$ 36,950	$ 41,521	$ 42,757
Nebraska	$ 32,006	$ 36,571	$ 39,583	$ 42,824
Nevada	$ 37,878	$ 43,495	$ 52,300	$ 38,211
New Hampshire	$ 41,020	$ 52,097	$ 47,733	$ 33,022
New Jersey	$ 49,111	$ 60,953	$ 29,232	$ 44,443
New Mexico	$ 31,350	$ 41,839	$ 57,974	$ 37,669
New York	$ 52,973	$ 51,940	$ 42,225	$ 39,407
North Carolina	$ 35,772	$ 42,714	$ 56,927	$ 42,246
North Dakota	$ 29,576	$ 36,375	$ 53,147	$ 37,401
Ohio	$ 36,830	$ 48,221	$ 46,304	$ 40,121
Oklahoma	$ 31,558	$ 39,485	$ 58,857	$ 32,983
Oregon	$ 36,226	$ 48,199	$ 36,350	$ 41,765
Pennsylvania	$ 39,249	$ 47,290	$ 48,629	$ 43,145
Rhode Island	$ 37,065	$ 41,745	$ 49,295	$ 37,407
South Carolina	$ 32,421	$ 34,393	$ 50,386	$ 47,018
South Dakota	$ 28,655	$ 42,804	$ 43,137	$ 46,540
Tennessee	$ 35,837	$ 54,409	$ 47,782	$ 39,933
Texas	$ 40,886	$ 39,874	$ 51,645	$ 38,017
Utah	$ 32,831	$ 46,316	$ 53,180	$ 41,341
Vermont	$ 33,649	$54,975	$ 45,308	$ 39,380
Virginia	$ 41,937	$ 43,033	No Data	$ 41,390
Washington	$ 40,224	$ 44,455	$ 55,538	$ 37,439
West Virginia	$ 30,545	$ 40,594	$ 44,091	$ 39,867
Wisconsin	$ 35,113	$ 42,232	$ 45,164	$ 45,037
Wyoming	$ 32,624	$ 43,711	$ 57,299	$ 34,333

Source: Derived from data provided by the United States Bureau of Labor Statistics, Quarterly Census of Employment and Wages, www.bls.gov

Kentucky New and Expanding Steel Industries Announced/Reported Between January 2000 and June 2006

Excluding locations and expansions known to have been cancelled

New Manufacturing Firms

County	City	Facility	Investment	Full-time Beg.	Full-time Full	Product
Boyd	Ashland	KES (Acquisition Company LLC) (2003)	$4,700,000	250	250	Steel flat bars.
Hancock	Hawesville	Columbia Specialty Metals (2004)		6	6	Reforms high purity aluminum into aluminum shot for the chemical and metal industry
Jefferson	Louisville	Steel Structural Systems Inc (2005)		12	80	Roll formed steel framing components and light-guage metal construction material
Madison	Richmond	Asahi Forge of America Corporation (2002)	$17,530,000	37	45	Press forging for the automotive industry
Nelson	Bardstown	MST Steel Corporation of Kentucky (2001)	$2,700,000	15	15	Slitting & cold-reduction of steel coil
Warren	Bowling Green	Kobe Steel Ltd (2003)	$35,645,000	78	78	Aluminum forging plant
Totals:		6	$60,575,000		474	

Expanding Manufacturing Firms

County	City	Facility	Investment	Full-time Beg.	Full-time Full	Product
Barren	Glasgow	Felker Brothers Corp (2001)	$2,000,000	5	5	Stainless steel pipe
Barren	Glasgow	Felker Brothers Corp (2003)	$250,000	0	0	Stainless steel pipe

Boone	Florence	IT Spring Wire (2000)	$12,978,000	26	26	Spring wire for auto industry
Boone	Florence	IT Spring Wire LLC (2003)	$1,280,000			Steel wire for coil spring of automobile
Boone	Florence	Mubea Inc (2001)	$31,200,000	145	145	Dual coated automotive springs
Boone	Florence	Plymouth Steel Corp (2000)	$3,100,000	15	15	Steel bars
Boyd	Ashland	AK Steel Corp (2004)	$65,000,000			Flat rolled carbon steel
Carroll	Carrollton	Parthenon Metal Works (2000)	$1,040,000	4	4	Blast furnaces, coke ovens, steel & rolling mills
Carroll	Carrollton	Parthenon Metal Works (2005)	$100,000	2	2	Steel tubing
Carroll	Ghent	North American Stainless, L. P. (2000)	$200,000,000	150	150	Hot rolling and finishing stainless steel
Carroll	Ghent	North American Stainless (2002)	$100,000,000	250	250	Stainless steel coils
Carroll	Ghent	North American Stainless (2002)	$160,961,000	50	50	Stainless steel coils
Carroll	Ghent	North American Stainless (2004)	$74,235,000	35	175	Stainless steel coils, sheets, and long products (bar, wire, and rod)
Carroll	Ghent	North American Stainless (2005)	$50,000,000			Stainless steel coils, sheets, and long products (bar, wire, and rod)
Carroll	Ghent	Steel Technologies Inc (2005)	$490,000			Process flat rolled steel
Christian	Hopkinsville	Superior Graphite Co (2000)	$494,979			Blast furnaces, coke ovens, steel & rolling mills
Christian	Hopkinsville	Superior Graphite Co (2002)	$250,000			Granular synthetic graphite & desulfurized petroleum coke

Clark	Winchester	Timken Co. (2000)		15	15	Iron and steel forgings
Clark	Winchester	Timken Co. (2002)	$21,660,000	80	80	Hot forged steel bearing rings
Daviess	Owensboro	Ken-Tron Manufacturing, Inc (2000)	$450,000			Steel wire drawing & nails & spikes
Gallatin	Ghent	Gallatin Steel Co (2003)	$4,000,000	20	20	Hot rolled coiled steel, flat rolled steel
Hardin	Elizabethtown	Copperweld Corp (2005)	$5,000,000	5	25	Stainless steel tubing
Henderson	Henderson	Taubensee Steel & Wire Co (2001)				Steel wire
Henry	Eminence	Steel Technologies (2003)	$7,500,000	32	32	Steel service center: steel rolling, annealing & slitting
Jefferson	Louisville	Tube Turns Technologies Inc (2001)	$20,000,000	150	150	Custom forgings
Jefferson	Louisville	Whip-Mix Corp (2001)	$300,000	2	2	Dental equipment & supplies, investment jewelry casting, vacuum mixing laboratory equipment & gypsum
Jefferson	Louisville	Whip-Mix Corp (2003)	$200,000	10	10	See above
Jefferson	Louisville	Whip-Mix Corp (2005)	$100,000			See above
Jefferson	Louisville	Worthington Steel Co (2001)	$137,308			Cold and hot rolled steel processing
Jessamine	Nicholasville	Adcom Wire Co., Div Leggett & Platt Inc (2000)	$1,413,588			Miscellaneous fabricated wire products
Madison	Berea	Kentucky Steel Center Inc (2002)	$250,000	3	3	Steel service center: coil slitting

Madison	Berea	Kentucky Steel Center Inc (2002)	$3,870,239	13	16	Steel service center: coil slitting
Madison	Berea	Kentucky Steel Center Inc (2004)	$4,700,000	15	15	Steel service center: coil slitting
Marion	Lebanon	Portland Forge (2005)	$331,000	2	2	Custom impression steel die forgings for truck & farm machinery industries
Marion	Lebanon	Teledyne Industries, Inc. (2000)	$1,800,000	16	16	Impression die forgings
McCracken	Paducah	JMS Inc (2003)	$819,750	15	15	Metal processing, distributing
Nelson	Bardstown	MST Steel Corporation of Kentucky (2002)	$750,000	8	8	Slitting & cold-reduction of steel coil
Russell	Russell Springs	Stephens Pipe & Supply (2003)	$1,250,000	25	25	Chain link fence, industrial gates, dog kennels.
Scott	Georgetown	Kentucky Advanced Forge LLC (2001)	$7,571,000			Warm forged bearing ring
Scott	Georgetown	Louisville Forge & Gear Works (2000)	$2,000,000			Iron & steel forgings
Scott	Georgetown	Louisville Forge & Gear Works (2002)	$12,000,000	22	22	Steel forgings, crankshafts, powder metal sinter forgings
Scott	Georgetown	Louisville Forge & Gear Works (2003)	$7,831,000	30	30	Steel forgings, crankshafts, powder metal sinter forgings
Scott	Georgetown	Louisville Forge & Gear Works (2004)	$1,000,000	100	100	Steel forgings, crankshafts, powder metal sinter forgings
Scott	Georgetown	Louisville Forge & Gear Works (2005)	$10,000,000	20	20	Steel forgings, crankshafts, powder metal sinter forgings, connecting rods, customized parts
Shelby	Shelbyville	Bekaert Corp (2000)	$990,000			Steel wire drawings & nails & spikes
Shelby	Shelbyville	Bekaert Corp (2001)	$2,100,000			Performed steel Staple wire & dramix nylon
Shelby	Shelbyville	Bekaert Corp (2002)	$6,029,000	15	15	Wire ties for twist wraps and air bags
Union	Pride	Pride industries Inc. (2000)	$155,000			Standing seam metal roofing panels, gutters and downspouts.

Union	Pride	Pride Industries Inc. (2003)	$262,329	20	20	Steel & aluminum standing seam roofing, preformed metal shingles
Warren	Bowling Green	Kobe Steel Ltd (2005)	$41,700,000	50	50	Aluminum forging plant
Totals:		50	$869,549,193		1,513	

Expanding Manufacturing Firms

				Full-time		
County	**City**	**Facility**	**Investment**	**Beg.**	**Full**	**Product**
Henry	Eminence	Steel Technologies (2000)	$900,000	0	0	Metal service center
Totals:		1	$900,000		0	
Grand		57	$931,024,193		1,987	

Kentucky New and Expanding Industries Report

Introduction and Methodology

The Kentucky new and expanding industries reports provide a measure of economic development based on qualified industrial activity in the Commonwealth announced or reported during the year. The reports are compiled from data provided by companies, local and industrial development contacts, newspaper announcements, and Cabinet programs designed to locate and retain industry.

The reports include estimated number of jobs, estimated investments, and products. Activities are reported in the year the announcements are made, even though full employment announced may not be realized until future years.

If investment or employment exceeds the original announced figures, the additional investment or jobs are included as an expansion in a later report. If actual employment figures are less than those reported, future employment expansion are not reported until after the projected figure has been reached. Efforts are made to eliminate duplications and overestimates of jobs and investments.

New industries are defined as companies locating in a Kentucky community for the first time, companies locating an additional facility in a community with new product line, or the reopening of a facility after an announced permanent shutdown of operations. Expansions are defined as companies increasing employment, capital investment or square footage to physical facilities. Replacement of machinery is included only if it results in greater productivity or product improvement. Expansions announced after January 1, 2003, are included only if they are expected to increase employment or involve at least $100,000 in capital investment. Announced locations/expansions are removed from the report if it is known that the location will not or the expansion did not take place.

The supportive industry section includes new and expanding warehouses, packaging and distribution facilities, corporate headquarters, and services.

Disclaimer

The information provided herein by the Kentucky Cabinet for Economic Development is believed to be accurate but is not warranted and is for informational purposes only. While all attempts are made to ensure the correctness and accuracy of information in this report and to make corrections and change errors brought to our attention, no representation or guarantee, express or implied, is made as to the accuracy of the information presented. Any information provided in this report is provided without assurances or warranties and should not be relied upon as fact. The Kentucky Cabinet for Economic Development assumes no liability for the accuracy of the information contained in this report.

Endnotes

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